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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,609	06/10/2005	Theo Anjes Ruijl	NL 021327	8945
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EXAMINER				
JOYCE, WILLIAM C				
ART UNIT		PAPER NUMBER		
3656				
MAIL DATE		DELIVERY MODE		
04/02/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/538,609

Applicant(s)

RUIJL, THEO ANJES

Examiner

William C. Joyce

Art Unit

3656

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/02)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s)/Mail Date ____

DETAILED ACTION

This is the First Office Action in response to the above identified patent application filed on June 10, 2005.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The disclosure is objected to because of the following informalities: Each section of the specification must have a heading (i.e. "Brief Summary of the Invention", "Brief Description of the Drawings", and "Detailed Description of the Invention"). Appropriate correction is required.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the gas bearing having more than two cavities interconnected through orifices. must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In claim 1 and elsewhere, the recitation of the term "content" when defining the size of the cavities is not entirely clear and should be changed to --volume-- to better define the device .

b. Claim 3, the limitation "the diameter of said orifice (7,11,16,17,20, 21) is between 0.05 mm and 0.3 mm, preferably between 0.1 mm and 0.2 mm" is not

fully understood. Specifically, it is not clear what orifice diameter is being claimed.

c. Claim 6, the limitation "the cavities (10,14,15,18,19) have a different content, the difference being more than 10%, preferably more than 20%, more preferably more than 50%. It appears applicant is attempting to define the difference of volume between the cavities, however it is unclear what volume is being claimed. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helms (USP 4,946,293).

Helms discloses a gas bearing system comprising two opposing and substantially parallel bearing surfaces (39,75) and at least one gas duct (34,36) for supplying gas to the bearing gap (38) between said bearing surfaces, a cavity (30,40) connected to said bearing gap (38) through an orifice (36,42).

Helms does not disclose the claimed volume of the cavity, but disclose the cavity having a volume of .1 cubic inches. However, it would have been obvious to one

of ordinary skill in the art at the time the invention was made to change the size of the cavity of Helms to a size between 0.001 cm^3 and 0.1 cm^3 motivation being to dampen vibrations of the bearing device for a particular application. Further, it would have been obvious to one of ordinary skill in the art to change the diameter of the orifice disclosed by Helms to a diameter between 0.1 mm and 0.2 mm, motivation being to dampen vibrations of the bearing device for a particular application. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

With respect to claim 4, Helms illustrates a recess (43).

With respect to claim 5, Helms discloses two cavities (30,40).

With respect to claim 6, it would have been obvious to one of ordinary skill in the art to vary the cavity sizes of Helms, motivation being to dampen vibrations of the bearing device for a particular application.

8. Claims 1-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loch (USP 3,049,383).

Loch illustrates in Figure 3 a gas bearing system comprising two opposing and substantially parallel bearing surfaces and at least one gas duct (24) for

supplying gas to the bearing gap between said bearing surfaces, a cavity (26,27) connected to said bearing gap through an orifice (28,29).

Loch does not disclose the claimed cavity volume. It would have been obvious to one of ordinary skill in the art at the time the invention was made to change the size of the cavity of Loch to a size between 0.001 cm^3 and 0.1 cm^3 motivation being to dampen vibrations of the bearing device for a particular application. Further, it would have been obvious to one of ordinary skill in the art to change the diameter of the orifice disclosed by Loch to a diameter between 0.1 mm and 0.2 mm, motivation being to dampen vibrations of the bearing device for a particular application. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

With respect to claim 4, Helms illustrates a recess (22).

With respect to claim 5, Helms discloses two cavities (26,27).

With respect to claim 6, it would have been obvious to one of ordinary skill in the art to vary the cavity sizes of Helms as defined by the claims, motivation being to dampen vibrations of the bearing device for a particular application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Joyce whose telephone number is (571) 272-7107. The examiner can normally be reached on Monday - Thursday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William C. Joyce/ 3/29/09
Primary Examiner, Art Unit 3656